

IN THE CLAIMS

Claims 1-27 (canceled).

Claim 28 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a Fischer-Tropsch derived olefinic product comprising linear olefins, branched olefins and non-olefins, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst, to obtain said Fischer-Tropsch derived olefinic product, with carbon monoxide and hydrogen in the presence of a catalytically effective quantity of a phosphine and/or phosphate ligand modified rhodium (Rh), cobalt (Co) or ruthenium (Ru) homogeneous hydroformylation catalyst and under hydroformylation reaction conditions, to produce oxygenated products comprising aldehydes and/or alcohols.

Claim 29 (new) A process according to claim 28, wherein the non-olefins comprise non-olefinic components with different functional groups.

Claim 30 (new) A process according to claim 28, wherein the hydroformylation catalyst is a phosphine ligand modified cobalt catalyst and wherein the hydroformylation reaction conditions include a hydroformylation temperature of 140°C to 210°C.

Claim 31 (new) A process according to claim 1, wherein the hydroformylation catalyst is a cobalt catalyst and wherein the ligand thereof is 9-phosphabicyclo [4,2,1] nonane or 9-phosphabicyclo [3,3,1] nonane.

Claim 32 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a Fischer-Tropsch derived olefinic product comprising linear and branched olefins, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst, to obtain said Fischer-Tropsch derived olefinic product, with carbon monoxide and hydrogen in the presence of a catalytically effective quantity of a phosphine and/or phosphate ligand modified rhodium (Rh) cobalt (Co) or ruthenium (Ru) homogeneous hydroformylation catalyst and under hydroformylation reaction conditions, to produce oxygenated products comprising aldehydes and/or alcohols.

Claim 33 (new) A process according to claim 32, wherein the Fischer-Tropsch derived olefinic product also comprises non-olefinic components with different functional groups.

Claim 34 (new) A process according to claim 32, wherein the hydroformylation catalyst is a phosphine ligand modified cobalt catalyst and wherein the hydroformylation reaction conditions include a hydroformylation temperature of 140°C to 210°C.

Claim 35 (new) A process according to claim 32, wherein the hydroformylation catalyst is a cobalt catalyst, and wherein the ligand thereof is 9-phosphabicyclo [4,2,1] nonane or 9-phosphabicyclo [3,3,1] nonane.

Claim 36 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a Fischer-Tropsch derived olefinic product comprising linear olefins, branched olefins and non-olefinic components with different functional groups, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst, to obtain said Fischer-Tropsch derived olefinic product, with carbon monoxide and hydrogen in the presence of a catalytically effective quantity of a phosphine and/or phosphate ligand modified rhodium (Rh), cobalt (Co) or ruthenium (Ru) homogeneous hydroformylation catalyst and under hydroformylation reaction conditions, to produce oxygenated products comprising aldehydes and/or alcohols.

Claim 37 (new) A process according to claim 36, wherein the hydroformylation catalyst is a phosphine ligand modified cobalt (Co) homogeneous catalyst, with the ligand thereof being 9-phosphabicyclo [4,2,1] nonane or 9-phosphabicyclo [3,3,1] nonane.

Claim 38 (new) A process according to claim 36, wherein the hydroformylation catalyst is a phosphine ligand modified cobalt catalyst and wherein the hydroformylation reaction conditions include a hydroformylation temperature of

140°C to 210°C.

Claim 39 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a Fischer-Tropsch derived olefinic product comprising linear and branched olefins, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst to obtain said Fischer-Tropsch derived olefinic product, with carbon monoxide and hydrogen in the presence of a catalytically effective quantity of an alkyl phosphine ligand modified cobalt (Co) homogeneous hydroformylation catalyst, wherein the ligand is 9-phosphabicyclo (4,2,1) nonane or 9-phosphabicyclo (3,3,1) nonane, and under hydroformylation reaction conditions, to produce oxygenated products comprising aldehydes and/or alcohols.

Claim 40 (new) A process according to claim 39, wherein the hydroformylation reaction conditions include a hydroformylation temperature of 140°C to 210°C.

Claim 41 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a Fischer-Tropsch derived olefinic product comprising linear and branched olefins, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst to obtain said Fischer-Tropsch derived olefinic product, with

carbon monoxide and hydrogen in the presence of a catalytically effective quantity of a phosphine ligand modified cobalt homogeneous hydroformylation catalyst and under hydroformylation reaction conditions, including a hydroformylation temperature of 140°C to 210°C, to produce oxygenated products comprising aldehydes and/or alcohols.

Claim 42 (new) A process for producing oxygenated products from an olefin-rich feedstock, which process comprises reacting, in a hydroformylation stage, a substantially unpurified Fischer-Tropsch derived olefinic product comprising linear olefins, branched olefins and non-olefins, obtained by subjecting a synthesis gas comprising carbon monoxide (CO) and hydrogen (H₂) to Fischer-Tropsch reaction conditions, in the presence of a suitable Fischer-Tropsch catalyst to obtain said Fischer-Tropsch derived olefinic product, with carbon monoxide and hydrogen in the presence of a catalytically effective quantity of a hydroformylation catalyst and under hydroformylation reaction conditions, to produce oxygenated products comprising aldehydes and/or alcohols.